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SEQUENCE LISTING

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Baynes, Brian  
Zhang, Shengsheng

<120> METHODS OF ENGINEERING SPATIALLY  
CONSERVED MOTIFS IN POLYPEPTIDES

<130> COTH-P01-002

<140> US 10/676,873

<141> 2003-09-30

<150> US 60/414,688

<151> 2002-09-30

<160> 4

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> Nucleotide sequence of TNF alpha chain b mutation  
b\_tyr\_119\_asp

<400> 1

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gtggagctga gagataacca gctgggtggtg ccatcagagg gcctgtacct catctactcc 180
caggctcctt tcaagggcca aggctgcccc tccacccatg tgctcctcac ccacaccatc 240
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tgccagaggg agaccccaga gggggctgag gccaaagccct ggtatgagcc catcgatctg 360
ggaggggtct tccagctgga gaagggtgac cgactcagcg ctgagatcaa tcggcccgcg 420
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<210> 2

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> Protein sequence of TNF alpha chain b mutation  
b\_tyr\_119\_asp

<400> 2

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Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala Gly Val
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Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
20          25          30
Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
35          40          45
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```

Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe
  50                      55                      60
Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
  65                      70                      75                      80
Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
                      85                      90                      95
Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
                      100                      105                      110
Pro Gln Tyr Glu Pro Ile Asp Leu Gly Gly Val Phe Gln Leu Glu Lys
                      115                      120                      125
Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Leu Phe
                      130                      135                      140
Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
  145                      150                      155

```

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<210> 3
<211> 474
<212> DNA
<213> Artificial Sequence

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<220>
<223> Nucleotide sequence of TNF alpha chain c mutations
      c_tyr_119_his, c_tyr_59_ser

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<400> 3
gtcagatcat cttctcgaac cccgagtgac aagcctgtag cccatgttgt agcaaaccct 60
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gtggagctga gagataacca gctgggtggtg ccatcagagg gcctgtacct catcagttcc 180
caggtcctct tcaagggcca aggctgcccc tccacccatg tgctcctcac ccacaccatc 240
agccgcacgc ccgtctccta ccagaccaag gtcaacctcc tctctgccat caagagcccc 300
tgccagaggg agaccccaga gggggctgag gccaaagcct ggtatgagcc catccatctg 360
ggaggggtct tccagctgga gaagggtgac cgactcagcg ctgagatcaa tcggcccgcg 420
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<210> 4
<211> 157
<212> PRT
<213> Artificial Sequence

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<220>
<223> Protein sequence of TNF alpha chain c mutations
      c_tyr_119_his, c_tyr_59_ser

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<400> 4
Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val
  1                      5                      10                      15
Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
                      20                      25                      30
Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
                      35                      40                      45
Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Ser Ser Gln Val Leu Phe
                      50                      55                      60
Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
                      65                      70                      75                      80
Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
                      85                      90                      95
Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
                      100                      105                      110

```

Pro	Gln	Tyr	Glu	Pro	Ile	His	Leu	Gly	Gly	Val	Phe	Gln	Leu	Glu	Lys
		115					120					125			
Gly	Asp	Arg	Leu	Ser	Ala	Glu	Ile	Asn	Arg	Pro	Asp	Tyr	Leu	Leu	Phe
	130					135					140				
Ala	Glu	Ser	Gly	Gln	Val	Tyr	Phe	Gly	Ile	Ile	Ala	Leu			
145					150					155					